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ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

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03/10/2020 68HERC19D0011

ORDER NO. 68HERC20F0171

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(a)	(b)	(c)	(d)	(e)	(f)	(g)		
	Admin Office: CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001 Period of Performance: 03/10/2020 to 03/09/2022							
0001	2026RRC023: New Task Order Request (ORD/IO) under the NAS Contract #68HERC19D0011 titled "Provision of Scientific and Technical Expertise for Environmental Public Health Issue Workshops/Business Meetings				64,000.00			
	TOCOR: Robin Clarke ALTOCOR: Tia Groves Acquisition Division: CAD CS: William Yates CO: Mark Cranley CL COR: Glennis Reslock AltCOR: Jorge Rangel Exemption Code ME262600 (NAS exempt from EPA 5170 Conference Policy) NO IT Codes or FITARA Required							
	Accounting Info: 20-21-C-26RR000-000FK6XR1-2532-26A5C-2 026RRC023-001 BFY: 20 EFY: 21 Fund: C Budget Org: 26RR000 Program (PRC): 000FK6XR1 Budget (BOC): 2532 Job #: ME262600 Cost: 26A5C DCN - Line ID: 2026RRC023-001 Funding Flag: Complete Funded: \$64,000.00							
0002	2026RRC023: New Task Order Request (ORD/IO) under the NAS Contract #68HERC19D0011 titled "Provision of Scientific and Technical Expertise for Environmental Public Health Issue Workshops/Business Meetings				236,000.00			
	TOCOR: Robin Clarke ALTOCOR: Tia Groves Continued							
0					\$200,000,00			

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$300,000.00

ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

PAGE NO

3

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68HERC19D0011 68HERC20F0171 03/10/2020 ITEM NO. SUPPLIES/SERVICES OHANTITY LINIT AMOUNT LINIT

EM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT		AMOUNT	QUANTIT
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	CO: Mark Cranley					
	CL COR: Glennis Reslock					
	AltCOR: Jorge Rangel					
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	EPA 5170 Conference Policy)					
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PERFORMANCE WORK STATEMENT

National Academy of Sciences (NAS)
Contract #68HERC19D0011
PR-ORD-20-00359
Task Order 68HERC20F0171

I. TITLE: Provision of Scientific and Technical Expertise for Environmental Public Health Issue Workshops/Business Meetings

II. Task Order Contracting Officer Representative(s):

Task Order Contracting Officer Representative (TOCOR) Name: Robin R. Clarke Office: ORD/OSA/IO

William Jefferson Clinton Building 1200 Pennsylvania Avenue, NW; Mail Code: 8150R, Rm No. 41231

Washington, DC 20460 **Phone:** 202-564-6493 **FAX:** 202-564-2070

Email: clarke.robin@epa.gov

Alternate Task Order Contracting Officer

Representative (Alt. TOCOR)

Name: Tia Groves
Office: ORD/IO

William Jefferson Clinton Building 1200 Pennsylvania Avenue, NW; Mail Code: 8101R, Room 41218

Washington, DC 20460 **Phone:** 202-564-5709 **FAX:** 202-565-2494

Email: groves.Tia@epa.gov

III. PERIOD OF PERFORMANCE: Date of Task Order award through 24 Months following award.

IV. PURPOSE OF TASK ORDER

EPA's Office of Research and Development is requesting that two(2) environmental issue-specific workshops be convened annually and one Environmental Health Matters Initiative (EHMI) business meeting be convened every other year to discuss the complexity of making decisions on matters involving the impact of the environment on human health. This activity will provide the EPA with independent scientific and technical input from recognized experts on how to advance human health and the impact of the environmental health field. The activity will also provide EPA with a comprehensive shared perspective on opportunities to address the impact of environmental stressors on human health.

V. BACKGROUND

The complexity of making decisions on matters involving the impact of the environment on human health is becoming increasingly apparent —from transportation planning to environmental remediation to use of chemicals. At the same time, EPA's scientific ability to address such complex issues is improving. But taking advantage of the scientific advances will

require bringing together both multiple disciplines (to further the science) and multiple sectors (to bring knowledge to action) to work across traditional boundaries. The National Academy of Science (NAS) is in a unique position to address these issues through the Environmental Health Matters Initiative (EHMI). EHMI was established to catalyze such work and to provide leadership on the big challenges in environmental health. The EHMI will transform how the nation comprehends the complex interplay of environmental factors affecting human health and mobilizes cross-sector and trans-disciplinary strategies to reduce the burden of disease and disability due to environmental factors and promote human health.

VI. SCOPE OF WORK

It is expected that the EHMI shall provide a new venue in which the environmental health community can interact with relevant sectors and disciplines to examine available information and develop innovative solutions to the nation's most significant environmental health challenges. With the goal of reducing the burden of disease and disability due to environmental factors that impact human health, EHMI shall work to: (1) explore the complexity of the challenges, (2) identify opportunities where progress can be made, (3) catalyze the development of holistic and sustainable opportunities, and (4) provide rapid expert input when crises demand.

The EHMI shall contribute to EPA's mission to advance human health and the impact of the environmental health field by convening experts, decision-makers, and stakeholders to collectively identify environmental public health fields of concern (during a EHMI business meeting) and develop and disseminate a comprehensive shared perspective on opportunities to address the impact of environmental stressors on human health in selected areas (during issuespecific workshops).

VII. DESCRIPTION OF TASKS

An EHMI business meeting shall be convened every other year to identify areas of cross-cutting environmental public health issues. Based on the environmental public health issues identified at the EHMI business meeting(s), issue-specific workshops (no more than three (3) per year) shall be convened to strategize and collaborate on how to address the issue. A milestone timeline for all of the EHMI meeting(s) and workshops shall be provided to the TOCOR or other relevant EPA staff designated by the TOCOR within 30 days of task initiation (See Task 1 Deliverables).

If needed, NAS shall also convene an ad hoc, environmental crisis issue meeting (no more than one per year). If held, this meeting will replace an issue specific workshop.

NAS shall also identify subject matter expertise and provide logistical support for business meeting, issue-specific workshop, and ad hoc environmental crisis meeting participants.

Task 1 shall be conducted once at the initiation of the task order. Task 2 shall be conducted at the initiation of the task order and updated on an as needed basis throughout the 24-month performance period. Task 3 shall be conducted once. Tasks 4 and 6 shall be conducted annually during the 24-month performance period. Task 5 shall be conducted on an as need basis, with no more than once occurrence per year.

Task 1: (Kick-off Teleconference)

Convene a kick-off teleconference between EPA and NAS with the Task Order Contracting Officer Representative (TOCOR), and relevant Office of Research and Development/Immediate Office of the Assistant Administrator (ORD/IOAA) management and technical staff, to review the scope of work. This kick-off teleconference shall occur within seven (7) days of acceptance of this task order.

Subtask 1.1 Milestone Timeline: NAS shall prepare a milestone timeline with details of the timing for the EHMI business meetings and issue-specific workshops within 30 days of task initiation. Updates to the milestone timeline shall be provided quarterly to the TOCOR, Contract Level Contracting Representative, Contracting Officer, or other relevant EPA staff designated by the TOCOR.

Task 1. Deliverables

Task	SubTask	Deliverable	Schedule
1	N/A	rack of releasing energy	Seven (7) days from TO acceptance
1		milestone timeline should detail the timing for EHMI issue-	Thirty (30) days from task initiation, with quarterly updates thereafter.

Task 2: (Subject Matter Experts)

This task provides EHMI with scientific and technical input at business meetings and issuespecific workshops by experts identified by NAS.

Subtask 2.1 Post Recruitment Meeting: NAS shall seek input from the scientific community, the public, and a broad range of relevant stakeholders as part of its process for identifying potential experts. NAS shall provide the TOCOR a proposed list of subject-matter-experts (SMEs) including a biographical sketch, proposed area of expertise for each SME, and if there are any issues regarding potential conflict of interest (COI) or impartiality. NAS shall determine who will participate in each meeting or workshop, based on the expertise of the SMEs. NAS shall then deliver a final list of participants for each meeting to the TOCOR.

Subtask 2.2 Recruit Experts: Identify a panel (10-15) of SMEs who (a) are recognized experts in the field(s) relevant to the request, (b) represent a range of broadly recognized views on the

issues identified by EPA, (c) are available to present and discuss their individual views at future EHMI business meeting(s) and environmental public health issue workshops and (d) have been evaluated for conflicts of interest and the appearance of a loss of impartiality.

Task 2. Deliverables

Task	SubTask	Deliverable	Schedule
2	2.1	NAS proposed list of subject-matter- experts (SMEs) including a biographical sketch, proposed area of expertise for each SME, and if there are any issues regarding potential conflict of interest (COI) or impartiality.	Ten (10) Days from conclusion of TO Kick-off Meeting
2	2.2	NAS to Recruit (10-15) Experts	Ten (10) Days from identifying SMEs under Task 2.1

Task 3: (EHMI Business Meeting)

NAS to convene and facilitate an EHMI business meeting, with the SMEs specified in Task 2, every other year. SMEs at this business meeting shall identify high-level environmental, public health issues that are cross-cutting and have impact across federal and state agencies and in the public and private sectors. Strategies and goals for addressing these cross-cutting issues should also be discussed, including the planning for issue-specific workshops. The SMEs shall prioritize the identified environmental public health issues, based on level of importance to public health and need for resolution. The identified environmental public health issues would become the basis for each of the issue-specific workshops, scheduled based on the issue's priority.

Task 3. Deliverables

ide written comments of the	
ness meeting(s), including the list o	Fifteen (15) days after conclusion of the meeting(s).
tified cross-cutting environmental c health issues and issue-specific	

Task 4: (Issue-Specific Workshops)

NAS shall convene and facilitate two (2) issue-specific workshops per year that each focus on one of the identified environmental public health issues, as specified in Task 3. These issue-specific workshops should include the SMEs specified in Task 2, as well as other, invited, topic-specific experts (identified by the SMEs) from across the federal, state, private and public

sectors. These workshops shall be solutions-driven, where activities, strategies, and potential collaborations to address the environmental public health topic to be identified.

Task 4. Deliverables

Task	SubTask	Deliverable	Schedule
4		Provide the agenda and list of attendees for each issue-specific workshop.	Seven (7) days before the workshop(s).
4	4.1	Provide written comments for each issue-specific workshop, including action items or next steps.	Fifteen (15) days after conclusion of the workshop(s).

Task 5: (Issue-Specific Meeting in Event of National Environmental Crisis)

In the event of a national environmental crisis, NAS may convene and facilitate an ad hoc, environmental crisis issue meeting (no more than one per year). If held, it will replace an issue-specific workshop. SMEs, identified in Task 2, should meet to discuss the issue, identify resources or strategies to provide a quick response to the environmental crisis, and discuss, subject to time and applicability, strategies to prevent the environmental crisis from occurring again.

Subtask 5.1 Issue-Specific Meeting Written Comments

Upon conclusion of each ad hoc, environmental crisis issue meeting NAS shall provide written comments of the meeting, including action items or next steps to the TOCOR or other relevant EPA staff designated by the TOCOR within 15 days.

Task 5. Deliverables

Task	SubTask	Deliverable	Schedule
5		Provide the agenda and list of attendees for the ad hoc, environmental crisis issue meeting.	Two (2) days before the meeting.
5	5.1	Provide written comments of the ad hoc, environmental crisis issue meeting, including action items or next steps.	Fifteen (15) days after conclusion of the meeting.

Task 6: (Logistics for Participants)

NAS shall provide for the participation of qualified experts as discussed for EHMI business meeting(s), environmental public health issue workshop(s), and ad hoc environmental crisis issue meetings, within 30 days prior to each meeting or workshop. Make all arrangements for transportation, lodging and logistical support for each expert to participate in the meetings or workshops, which shall be held in Washington, D.C. or another location specified by EPA.

Task 6. Deliverables

Task	SubTask	Deliverable	Schedule
6		Logistical Arrangements for Experts	Thirty (30) days prior to the meeting(s) and workshop(s).

VIII. ACCEPTANCE CRITERIA

The Contractor shall prepare high quality products and that are reproducible and transparent. Figures submitted shall be of high quality similar to presentations developed for national scientific forums and should be formatted as jpeg or TIFF files. Deliverables shall be edited for grammar, spelling, and logic flow as well as, technical accuracy, completeness, timeliness, grammatically correct, free of typographical errors, and conformance with the specific task, charge and expertise and deliverables of this Performance Work Statement. The technical information shall be reasonable complete and presented in a logical, readable manner. Text deliverables shall be provided in Microsoft Word 2016, *Adobe Acrobat*, or compatible format. Deliverables will be accepted upon review and approval by the TOCOR.

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National Academy of Sciences Attn: JAMES BURKE 500 FIFTH STREET NW WASHINGTON DC 200012736				yb. Dated (SEE ITEM 11) 10A. Modification of contract/order no. 68HERC19D0011 68HERC20F0171 10B. DATED (SEE ITEM 13)							
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NAME OF OFFEROR OR CONTRACTOR

National Academy of Sciences

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	RTP Finance Center				
	US Environmental Protection Agency				
	RTP-Finance Center (AA216-01) 109 TW Alexander Drive				
	www2.epa.gov/financial/contracts				
	Durham NC 27711				
	Period of Performance: 03/10/2020 to 03/09/2022				

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Except as provi	ded herein, all terms and conditions of the do	cument referenced in Item 9A	or 10A, as heretofore change	ed, remains unchanged	and in full force	and effect.	
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52.204-25 Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

As prescribed in 4.2105(b) and in the applicability instructions in interim FAR Case 2019-009, insert the following clause:

Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (Aug 2020)

(a) <u>Definitions</u>. As used in this clause—

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means—

- (1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);
- (2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- (3) Telecommunications or video surveillance services provided by such entities or using such equipment; or
- (4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means-

- (1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;
- (2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-

- (i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or
 - (ii) For reasons relating to regional stability or surreptitious listening;
- (3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);
- (4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);
- (5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or
- (6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition. (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.

- (2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.
 - (c) Exceptions. This clause does not prohibit contractors from providing—
- (1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
 - (d) Reporting requirement.
- (1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.
- (2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause
- (i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
- (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

(End of clause)

AMENDMENT OF SOLICITATION/MODIFIC	ATION OF CO	NTRACT	1. CONTRACT ID CODE	PAGE OF PAGES					
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE D	ATE 4	. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)					
P00002	See Block	. 16C							
6. ISSUED BY CODE	CAD		7. ADMINISTERED BY (If other than Item 6)	CODE					
CAD US Environmental Protection 26 West Martin Luther King D Mail Code: W136 Cincinnati OH 45268-0001	Agency								
8. NAME AND ADDRESS OF CONTRACTOR (No., street	t, county, State and ZI	P Code)	9A. AMENDMENT OF SOLICITATION NO.						
National Academy of Sciences Attn: JAMES BURKE 500 FIFTH STREET NW WASHINGTON DC 200012736			9B. DATED (SEE ITEM 11) ** 10A. MODIFICATION OF CONTRACT/ORDER NO. 68HERC19D0011 68HERC20F0171 10B. DATED (SEE ITEM 13)						
CODE 041964057	FACILITY CODE		03/10/2020						
	11. THIS ITEM	ONLY APPLIES TO AM	ENDMENTS OF SOLICITATIONS						
separate letter or electronic communication which incl RECEIVED AT THE PLACE DESIGNATED FOR THE OFFER. If by virtue of this amendment you desire to each letter or electronic communication makes referent 12. ACCOUNTING AND APPROPRIATION DATA (If required see Schedule 13. THIS ITEM ONLY APPLIES TO METERS AND APPLIES AND APPLIES TO METERS AND APPLIES AND APPLIES AND APPLIES TO METERS AND APPLIES AND APPLI	ludes a reference to RECEIPT OF OFF change an offer almone to the solicitation uired)	the solicitation and ame ERS PRIOR TO THE He eady submitted , such ch on and this amendment,	OUR AND DATE SPECIFIED MAY RESULT IN REJ lange may be made by letter or electronic communi and is received prior to the opening hour and date s IT MODIFIES THE CONTRACT/ORDER NO. AS DI	/LEDGEMENT TO BE JECTION OF YOUR ication, provided specified.					
	CT/ORDER IS MOD H IN ITEM 14, PUR	DIFIED TO REFLECT TH SUANT TO THE AUTHO	HANGES SET FORTH IN ITEM 14 ARE MADE IN THE ADMINISTRATIVE CHANGES (such as changes IRITY OF FAR 43.103(b).						
D. OTHER (Specify type of modification	and authority)								
E. IMPORTANT: Contractor X is not	is required to	sign this document and r	eturn copies to the issuir	ng office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION DUNS Number: 041964057 TOCOR: GLENNIS RESLOCK Max E The purpose of this modifica modification signed by Raoul unchanged.	xpire Date	e: 03/09/2022 o incorporate	2 e the attached EPA blanket	t administrative					
Continued Except as provided herein, all terms and conditions of the 15A. NAME AND TITLE OF SIGNER (Type or print) 15B. CONTRACTOR/OFFEROR		nced in Item 9 A or 10A, 5C. DATE SIGNED	16A. NAME AND TITLE OF CONTRACTING OFF William M. Yates 16B. UNITED STATES OF AMERICA	ICER (Type or print) 16C. DATE SIGNED					
(Signature of person authorized to sign)			(Signature of Contracting Officer)	09/29/2020					

 CONTINUATION SHEET
 REFERENCE NO. OF DOCUMENT BEING CONTINUED
 PAGE
 OF

 68HERC19D0011/68HERC20F0171/P00002
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NAME OF OFFEROR OR CONTRACTOR

National Academy of Sciences

ITEM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
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	RTP Finance Center				
	US Environmental Protection Agency				
	RTP-Finance Center (AA216-01)				
	109 TW Alexander Drive				
	www2.epa.gov/financial/contracts				
	Durham NC 27711				
	Period of Performance: 03/10/2020 to 03/09/2022				

AMEN	IDMENT OF SOLICITATION	MODIFICATION (OF CONTRACT	1. CONTRACT ID CO	DDE F	PAGE C	F PAGES
2. AMENDME	NT/MODIFICATION NUMBER	3. EFFECTIVE DATE 08/13/2020	4. REQUISITION/PURCHASE	E REQUISITION NUMBER	5. PROJECT I	NUMBER ((If applicable)
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or (c) By separa RECEIVED AT by virtue of this communication	ng items 8 and 15, and returning ate letter or electronic communication which is THE PLACE DESIGNATED FOR THE RECE amendment you desire to change an offer al makes reference to the solicitation and this a TING AND APPROPRIATION DATA (If require	ncludes a reference to the sol EIPT OF OFFERS PRIOR TO ready submitted, such change mendment, and is received p	icitation and amendment num THE HOUR AND DATE SPE may be made by letter or ele	abers. FAILURE OF YO ECIFIED MAY RESULT I ectronic communication, late specified.	UR ACKNOWLE IN REJECTION (provided each le	DGMENT OF YOUR	TO BE OFFER. If
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X	B. THE ABOVE NUMBERED CONTRACT/(appropriation data, etc.) SET FORTH IN	ORDER IS MODIFIED TO RE ITEM 14, PURSUANT TO TH	FLECT THE ADMINISTRATI HE AUTHORITY OF FAR 43.1	VE CHANGES (such as 103(b).	changes in payi	ng office,	
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		s required to sign this			s to the issuir	ng office	
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Except as provi	ded herein, all terms and conditions of the do	cument referenced in Item 9A	or 10A, as heretofore change	ed, remains unchanged	and in full force	and effect.	
	ND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF				•
			Raoul D. Scott, Dire	ctor Policy, Train	ing and Ove	ersight I	Division
15B. CONTRA	CTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF A		RAOUL SCOTT 1:40:17 -04'00'	16C. DA	TE SIGNED
(S	ignature of person authorized to sign)		(Signature	of Contracting Officer)			

52.204-25 Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

As prescribed in 4.2105(b) and in the applicability instructions in interim FAR Case 2019-009, insert the following clause:

Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (Aug 2020)

(a) <u>Definitions</u>. As used in this clause—

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means—

- (1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);
- (2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- (3) Telecommunications or video surveillance services provided by such entities or using such equipment; or
- (4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means-

- (1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;
- (2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-

- (i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or
 - (ii) For reasons relating to regional stability or surreptitious listening;
- (3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);
- (4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);
- (5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or
- (6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

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(b) Prohibition. (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.

- (2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.
 - (c) Exceptions. This clause does not prohibit contractors from providing—
- (1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
 - (d) Reporting requirement.
- (1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.
- (2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause
- (i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
- (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

(End of clause)

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ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

PAGE NO

2

 IMPORTANT: Mark all packages and papers with contract and/or order numbers.

 DATE OF ORDER
 CONTRACT NO.
 ORDER NO.

 06/30/2020
 68HERC19D0011
 68HERC20F0314

ITEM NO.	020 68HERC19D0011 SUPPLIES/SERVICES	QUANTITY	LINIT	UNIT	AMOUNT	QUANTITY
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(a)	(b) Admin Office:	(c)	(d)	(e)	(f)	(g)
	CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001 Period of Performance: 06/30/2020 to 05/31/2022 2026RRC047:New task Order under CONTRACT					
	NO.: #68HERC190011 to NAS. TOCOR: Tia Groves; CO William Yates					
001	2026RRC047:New task Order under CONTRACT NO.: #68HERC190011 to NAS. TOCOR: Tia Groves; CO William Yates				983,925.00	
	Accounting Info: 20-21-C-26RR000-000FK6XR1-2532-26A5C-2 026RRC047-001 BFY: 20 EFY: 21 Fund: C Budget Org: 26RR000 Program (PRC): 000FK6XR1 Budget (BOC): 2532 Cost: 26A5C DCN - Line ID: 2026RRC047-001 Funding Flag: Complete Funded: \$983,925.00					
	2026RRC047: New task Order under CONTRACT NO.: #68HERC190011 to NAS. TOCOR: Tia Groves; CO William Yates					
002	2026RRC047: Additional funding to meet the proposal.				261,360.00	
	Accounting Info: 19-20-C-26RR000-000FK6XR1-2532-26A5C-2 026RRC047-002 BFY: 19 EFY: 20 Fund: C Budget Org: 26RR000 Program (PRC): 000FK6XR1 Budget (BOC): 2532 Cost: 26A5C DCN - Line ID: 2026RRC047-002 Funding Flag: Complete Funded: \$9,113.00 Accounting Info: 19-20-C-26RR000-000FK8XPV-2532-26A5C-2 026RRC047-003 BFY: 19 EFY: 20 Fund: C Budget Org: 26RR000 Program (PRC): 000FK8XPV Budget (BOC): 2532 Cost: Continued					
	TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))				\$1,245,285.00	

ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

PAGE NO

3

IMPORTANT: Mark all packages and papers with contract and/or order numbers. DATE OF ORDER CONTRACT NO. ORDER NO.

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	Budget Org: 26RR000 Program (PRC):					
	000FK9XR6 Budget (BOC): 2532 Cost:					
	26A5C DCN - Line ID: 2026RRC047-004					
	Funding Flag: Complete					
	Funded: \$16,034.00					
	Accounting Info:					
	20-21-C-26RR000-000FK6XR1-2532-26A5C-2					
	026RRC047-005 BFY: 20 EFY: 21 Fund: C					
	Budget Org: 26RR000 Program (PRC):					
	000FK6XR1 Budget (BOC): 2532 Cost:					
	26A5C DCN - Line ID: 2026RRC047-005					
	Funding Flag: Complete					
	Funded: \$71,177.00					
	Accounting Info:					
	20-21-C-26RR000-000FK8XPW-2532-26A5C-2					
	026RRC047-006 BFY: 20 EFY: 21 Fund: C					
	Budget Org: 26RR000 Program (PRC):					
	000FK8XPW Budget (BOC): 2532 Cost:					
	26A5C DCN - Line ID: 2026RRC047-006					
	Funding Flag: Complete					
	Funded: \$100,000.00					
	Accounting Info:					
	20-21-C-26RR000-000FK8-2532-26A5C-2026					
	RRC047-007 BFY: 20 EFY: 21 Fund: C					
	Budget Org: 26RR000 Program (PRC):					
	000FK8 Budget (BOC): 2532 Cost: 26A5C					
	DCN - Line ID: 2026RRC047-007					
	Funding Flag: Complete					
	Funded: \$16,504.00					

PERFORMANCE WORK STATEMENT

National Academy of Sciences (NAS)
Contract #68HERC190011
Task Order #68HERC20F0314

I. TITLE: Strategic Positioning of EPA's Research and Development Enterprise to Inform Future

Environmental Protection: The Road Ahead

EAS Short Title: NAS Anticipatory Research Report

II. Task Order Contracting Officer Representative(s):

Task Order Contracting Officer Alternate Task Order Contracting Officer

Representative (TOCOR) Representative (Alt. TOCOR)

Name: Tia Groves

Office: ORD/IO

Name: Robin Clarke
Office: ORD/OSA

William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 8101R, Room No. 41218

William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 8105R, Room 41231

Washington, DC 20460 Washington, DC 20460

III. PERIOD OF PERFORMANCE:

Date of Task Order Award through 20 months following award.

IV. PURPOSE OF TASK ORDER

The NAS shall develop a consensus report to inform how EPA might strategically position its research and development enterprise to support EPA's mission and to anticipate and respond to the future research needs of the Agency. Specifically, building on the 2012 NAS report, *Science for Environmental Protection: The Road Ahead*, the NAS is being requested to provide targeted advice on scientific and technological capabilities that EPA might require to meet the environmental challenges for the coming decades. The NAS shall examine advances in fields of science and ongoing research, and how these advances will impact the types of work done in EPA's Office of Research and Development (ORD) and how that work is accomplished. The NAS report shall span a time horizon of 10-15 years. The NAS study shall provide recommendations (including ones implementable in the near-term) on how ORD should strategically position itself to best take advantage of emerging science and technology to meet the current and future challenges EPA may face to fulfill its mission to protect human health and the environment.

V. BACKGROUND

EPA's Office of Research and Development (ORD) provides the science, technical support, technology, and tools to support EPA's mission to protect human health and the environment. Broadly, ORD accomplishes this support through:

- 1. <u>Research to Inform Agency Priorities</u> Conduct innovative and anticipatory research to solve longer-term environmental challenges and provide the scientific bases for future environmental protection. This research is applied to the range of EPA program and regional office needs.
- 2. <u>Targeted Research to Meet Statutory Requirements and Specific Environmental Challenges</u> Provide research support to EPA program and regional offices, as well as states, tribes, and local communities, to help them respond to current environmental challenges.
- 3. <u>Scientific and Technical Support</u> Offer unique expertise and translational capacity to assist EPA programs and regions, local, state and tribal governments, and other Federal agencies as they respond to both emergency and longer-term environmental issues.

The three types of ORD support are complementary. They build off and inform each other, providing the foundation for ORD to inform Agency priorities and decisions, both near and long-term. ORD's capacity to conduct innovative and anticipatory research is necessary to ensure that the latest science and technology informs Agency decision-making and solves longer-term environmental challenges. In addition, since statutes and laws often have lifecycles that differ from the continuous evolution of scientific information, ORD often needs to provide the translational capacity to apply new scientific information within the construct of existing statutes and laws. Having the capacity to drive the leading edge of science and to translate, adapt, and apply science to inform decision-making enables ORD to more effectively inform policy-making, and provide scientific and technical support.

Past experience in ORD has demonstrated the importance of understanding how scientific advances can impact the organization and, by extension, the Agency. For example, in the 1980's and 1990's, rapid advances in "-omics" technologies and corresponding developments in bioinformatics and computational methods created a unique opportunity to apply these technologies and approaches to toxicology. Recognizing these scientific advances, a computational toxicology program was established in 2002, with the National Center for Computational Toxicology (NCCT) being formally established in 2004. NCCT initially focused on endocrine disruption. The tools and methods developed during the early days of NCCT were brought to bear in 2010 as the Agency responded to the Deep Water Horizon oil spill, where they provided rapid evaluations of the toxicity of potential dispersants. These advances have enabled ORD to become a world leader in computational toxicology, and to provide critical scientific contributions as the Agency implements the amended Toxic Substances Control Act.

Similar anticipatory actions were conducted by ORD under the Environmental Monitoring and Assessment Program (EMAP, 1994-2006) to monitor and assess the status and trends of the Nation's ecological resources. EMAP developed an innovative probabilistic approach for monitoring ecosystem integrity and dynamics. When originally developed, EMAP demonstrated that a probabilistic approach could sufficiently identify impaired waters under the Clean Water Act (S. 305b). Today, EPA's Office of Water works with state, tribal, and federal partners to design and implement the National Aquatic Resource Surveys (NARS), using probabilistic monitoring to assess the quality of the Nation's aquatic resources. EMAP laid the foundation for this approach. If ORD had not conducted the research to establish EMAP in the 1990's, the

Agency would not have had a foundation to develop the NARS Program in the mid-2000's, and provide decision-makers and the public improved, statistically-valid, environmental information.

The National Research Council (NRC) has previously provided insights relevant to ORD anticipatory research, notably in the 2012 report, *Science for Environmental Protection: The Road Ahead*. This report provided recommendations that EPA better integrate systems thinking into its approaches to protecting human health and the environment, enhance science leadership within the Agency, and strengthen scientific capacity both within and outside EPA. The report also identified a number of current and future challenges. It also recommended that EPA develop a scanning capability to foresee emerging scientific approaches, examine ways to improve its management and use of large environmental datasets, build capacity to support innovation in environmental science and technology, and prioritize its research activities in light of an anticipated constrained budgetary environment. It is expected that the NAS will build on this report as well as activities of several of its relevant Boards, including efforts under development within the Environmental Health Matters Initiative (http://nas-sites.org/envirohealthmatters/).

Strategic Planning in ORD

Over the last year, each of ORD's six national research programs developed a Strategic Research Action Plan (StRAP) to plan its research efforts for Fiscal Years 2019-2022. Collectively, the StRAPs lay the foundation for EPA's research programs to provide focused research that meets the Agency's statutory requirements and the goals outlined in the FY 2018-2022 U.S. EPA Strategic Plan and the Office of Research and Development Strategic Plan 2018 -2022. The StRAPs are designed to guide an ambitious research portfolio that delivers the science and engineering solutions the Agency needs to meet its goals now and into the future, while also cultivating an efficient, innovative, and responsive research enterprise. The strategic directions and outputs identified in each of the six StRAPs serve as planning guides for ORD's four centers to design specific research products to address partner and stakeholder needs. More information about ORD's organization and the StRAPs will be provided to the NAS in advance of the kick-off meeting.

One of ORD's three strategic goals relates to "informing and supporting Federal, state, tribal and local decision making." In developing the StRAPs, the national research programs engaged with and solicited input from a broad array of key stakeholders (https://www.epa.gov/research/epa-research-supports-states). This proposed project and its report will help inform future strategic planning in ORD that promotes these constructive partnerships.

VI. SCOPE OF WORK

This Task Order (TO) builds on the broad recommendations from the 2012 NRC report by requesting the NAS to examine current and anticipated scientific and technological advances, and their potential impacts on ORD and its capacity to provide timely research to inform Agency priorities. The NAS is asked to convene a Committee to identify emerging scientific advances potentially applicable to the Agency's mission, as well as to provide actionable recommendations on how ORD might consider incorporating emerging science into the Agency's research planning, so that ORD becomes an increasingly impactful organization.

VII. DESCRIPTION OF TASKS

For the duration of the project, across all tasks, monthly written progress reports shall be provided to the Contracting Officer (CO), Contract Level COR (CL COR) and Task Order Contracting Officer Representative (TOCOR). These reports shall include a description of the work progress completed, any difficulties encountered, anticipated activities/schedule, and an invoice.

Task 1: Establish a Committee

The NAS shall establish an ad hoc Committee of approximately 20 experts from academia, non-governmental/public interest organizations, private industry, and Federal, state, tribal, and local governments. Committee membership should be balanced with approximately equal participation across the groups identified above and is encouraged to take into account geographical diversity. Collectively, Committee member expertise shall encompass the physical, chemical, biological, environmental, and social sciences; exposure science; public health; engineering; informatics/information technology; risk assessment, risk management, and environmental policy decision-making. The NAS is encouraged to include among the Committee an individual(s) with expertise in strategic foresight and/or identification of new and emerging science and technology. The NAS is also encouraged to include among the Committee an individual(s) with expertise/familiarity in the communication and application of scientific information in environmental policymaking.

The Committee membership shall be for a minimum of 12 months and a maximum of 20 months.

Subtask 1.1 - Kickoff meeting

An initial kickoff meeting shall be held between EPA and NAS management for the project to discuss the broad outlines of the requested report, and address any questions raised by the NAS that would inform the development of the Committee.

Task 1. Deliverables

Auto	SubTask	Deliverable	Schedule
1	N/A	Establish a Committee. – Transmit a copy of	Within 3 months of the date of task order award.
		committee membership to CL COR and TOCOR.	
1	1.1	Kickoff Meeting	Within 14 days of the date of task order award.

Task 2: Convene Workshop(s)/Meeting(s) to Support Report Development

The NAS shall convene and hold up to five (5) workshops and/or public meetings, with open and closed portions of the meeting(s), to facilitate the exchange of ideas from Committee members and stakeholders on the topics related to its report. The number of meetings specified in Task 2 should not be construed to include internal Committee meetings necessary to develop a consensus report. One (1) workshop shall be convened to hear perspectives and needs from EPA program and regional leaders, as well as states, on issues of current or emerging concern. Additionally, the workshop should seek the perspective of ORD

leadership on the existing and anticipatory research components of ORD's national research programs. Other potential workshop or public meeting topics to support the NAS report development may include discussions on emerging issues in the environmental and human health sciences, strategic foresight, and scientific horizon scanning/scenario planning. Workshops and/or public meetings should include the opportunity for public comment.

Advance notice of the workshops and/or meetings identified in this task shall be provided to the TOCOR and CL COR via email 90 days in advance of the time, location, and agenda of all workshops and/or meetings. All communications regarding public meetings should go through the TOCOR and CL COR. The NAS should also provide an agenda of the public portion of all workshops and/or meetings in accordance with Section 15 of the FACA, which requires a contractor to "summarize" certain aspects of non-public meetings and make the summary available through their website. If public websites or similar means are used to disseminate information to the public, the TOCOR and CL COR shall be notified of the location of such information (e.g., website addresses, as well as all relevant changes to them).

Task 2. Deliverables

Task	SubTask	Deliverable	Schedule
2		Hold at least one, and up to five workshops and/or public meetings to inform report development.	At least one workshop must be held no later than 6 months after establishing the Committee. All workshops shall be completed within 18 months from the date of task order award.

COVID Considerations

The NAS shall conduct some or all meetings, including the workshops, as virtual meetings if face-to face meetings are not possible. Options for face-to-face and virtual meetings shall be included in the proposal.

Task 3: Develop a Consensus Report

The Committee shall develop recommendations in a consensus report that identifies, 1) the areas of emerging/evolving science and/or research advances that ORD should consider in its research and organizational planning over the next 10-20 years, and 2) recommendations on potential approaches to incorporate scientific advances and innovative technologies/tools to position ORD to anticipate and respond to future research needs, thereby better meeting the needs of EPA decision-makers. In making its recommendations on approaches, the Committee shall consider the array of current approaches and tools ORD has available to address emerging science (intramural research, grants, cooperative agreements, interagency agreements), and whether a given approach (or combination) would best address a future environmental issue.

The Committee shall consider past reports and analyses by the NAS and/or other organizations, as well as presentations and documentation provided by EPA (e.g., the Strategic Research Action Plans for ORD's national research programs). In identifying emerging scientific advances, the Committee shall indicate how

mature an emerging scientific area is, and its applicability to environmental issues, so that ORD may prioritize its approach to responding.

In performing its task, the Committee should consider the Agency's mission and its current initiatives, and may consider other broader topics including, but not limited to, the following:

- Biotechnology What recent advances in biotechnology and associated fields warrant the greatest attention and offer potential application to human health and environmental decision making?
 How should ORD apply advances in biotechnology in its research program?
- Big Data Are there strategies or actions ORD should take to address the increasing sources, volume, and diversity of data? How should ORD ensure it has capacity to manage, analyze, and share data used to inform Agency decisions?
- Climate Impacts— Are there emerging areas in science and technology that ORD should examine to better understand the role of climate as a stressor (e.g., biodiversity, air quality, etc.)?
- Environmental Monitoring and Sensors How should ORD capitalize on the rapid advances in sensor technology to better understand environmental exposures? What additional advances in sampling protocols and analytical techniques are needed to understand emerging threats?
- Impacts of Stressors on Ecological and Human Health Are there new technologies or methodological approaches that can build on existing advances in computational toxicology and computational exposure to address emerging threats and better characterize the impact of stressors? Stressors should be defined broadly to include chemical, biological, radiological, and physical as well as any other environmental factors identified by the Committee.
- Artificial Intelligence (AI)/Machine Learning AI and/or machine learning are already impacting our lives. How should ORD apply current, and prepare for future, advances in AI/machine learning to enhance our ability to inform innovative approaches to the protection of human health and the environment?
- Cross-cutting topics Are there opportunities to apply emerging science across fields to advance
 human health and environmental protection? For example, while EPA collects large and diverse
 types of monitoring data from numerous sources, we may only use a subset of that information.
 How might ORD integrate monitoring, big data, and AI to produce an early warning system for
 environmental and human health issues before they become problems? This is an example of a
 question that cuts across the topics listed above. The Committee is encouraged to identify other
 cross-cutting topics, including those involving fields not identified above.

Subtask 3.1 - Prepublication draft of report

EPA requires that NAS provide a prepublication draft of the report no later than 14 days prior to public release of the report, or 14 days before the end of the period of performance, whichever occurs first.

Subtask 3.2 - Pre-release briefing for ORD

EPA requires that NAS provide a briefing for senior ORD leadership on the report, including participation from the Committee members, prior to the public release of the report. The briefing

should occur no later than 14 days prior to the public release of the report, or 14 days before the end of the period of performance, whichever occurs first.

Subtask 3.3. – Release of final report

The final consensus report should be completed and made publicly available 14 days following transmittal of the prepublication draft to the TOCOR and CL COR, and no later than the end of the period of performance.

Task 3. Deliverables

Task	SubTask	Deliverable	Schedule
3	3.1	Prepublication draft of report	14 days prior to public release of report. No later than 14 days prior to the end of the period of performance.
3	3.2	Briefing for senior ORD leadership on report.	3 days prior to public dissemination of the report. No later than 3 days prior to the end of the period of performance.
3	3.3	Final report	14 days after transmittal of the prepublication draft to EPA. No later than 30 months after the date of task order award.

VIII. ACCEPTANCE CRITERIA

The Contractor shall prepare high quality products and that are reproducible and transparent. Figures submitted shall be of high quality similar to presentations developed for national scientific forums and should be formatted as jpeg or TIFF files. Deliverables shall be edited for grammar, spelling, and logic flow. The technical information shall be reasonable complete and presented in a logical, readable, manner. Text deliverables shall be provided as 508-compliant documents in Microsoft Word 2010 or compatible format and PDF.

AMENDMENT OF SOLICITATION/MODIFIC	ATION OF CO	NTRACT		1. CONTRACT ID CODE	PAGE	OF PAGES
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE	DATE 4	4. REQ	UISITION/PURCHASE REQ. NO.	5. PROJECT	
P00001	See Bloc	k 16C	PR-0	RD-20-02547		
6. ISSUED BY CODE	CAD		7. ADM	IINISTERED BY (If other than Item 6)	CODE	
CAD US Environmental Protection 26 West Martin Luther King D Mail Code: W136 Cincinnati OH 45268-0001						
8. NAME AND ADDRESS OF CONTRACTOR (No., street	t, county, State and 2	ZIP Code)	() 9A.	AMENDMENT OF SOLICITATION NO.		-
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CODE 041964057	FACILITY CODE		0	6/30/2020		
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Except as provided herein, all terms and conditions of the	ne document refer	enced in Item 9 A or 10A,	A, as her	etofore changed, remains unchanged and in f	ull force and e	ffect.
15A. NAME AND TITLE OF SIGNER (Type or print)				NAME AND TITLE OF CONTRACTING OFFICE Liam M. Yates	CER (Type or p	print)
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED	16B. U	INITED STATES OF AMERICA	CCYRONIC	16C. DATE SIGNED
(Signature of person authorized to sign)			- 5.5	(Signature of Contracting Officer)	SIGNATURE	09/29/2020

 CONTINUATION SHEET
 REFERENCE NO. OF DOCUMENT BEING CONTINUED 68HERC19D0011/68HERC20F0314/P00001
 PAGE 0F
 OF

NAME OF OFFEROR OR CONTRACTOR

National Academy of Sciences

M NO.	SUPPLIES/SERVICES	QUANTITY		UNIT PRICE	AMOUNT
A)	(B)	(C)	(D)	(E)	(F)
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	Beginning FiscalYear 19				
	Ending Fiscal Year 20				
	Fund (Appropriation) C				
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	Program (PRC) 000FK8XPW				
	Budget (BOC) 2532				
	Job # (Site/Project)				
	Cost Organization 26A5C				
	DCN-LineID 004				
	Quantity: 0				
	Amount: \$9,525.00				
	Amount: \$3,323.00				
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	19-20-C-26RR000-000F84-2532-26A5C-002				
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	Fund (Appropriation) C				
	Budget Organization 26RR000				
	Program (PRC) 000F84				
	Budget (BOC) 2532				
	Job # (Site/Project)				
	Cost Organization 26A5C				
	DCN-LineID 002				
	Quantity: 0				
	Amount: \$85,825.00				
	NEW ACCOUNTING CODE ADDED:				
	Account code:				
	19-20-C-26RR000-000F72XPC-2532-26A5C-001				
	Beginning FiscalYear 19				
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	Fund (Appropriation) C				
	Budget Organization 26RR000				
	Program (PRC) 000F72XPC				
	Budget (BOC) 2532				
	Job # (Site/Project)				
	Cost Organization 26A5C				
	DCN-LineID 001				
	Quantity: 0				
	Amount: \$5,211.00				
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 CONTINUATION SHEET
 REFERENCE NO. OF DOCUMENT BEING CONTINUED
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 OF

 68HERC19D0011/68HERC20F0314/P00001
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NAME OF OFFEROR OR CONTRACTOR

National Academy of Sciences

M NO.	SUPPLIES/SERVICES	QUANTITY		UNIT PRICE	AMOUNT
A)	(B)	(C)	(D)	(E)	(F)
	NEW ACCOUNTING CODE ADDED:				
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	19-20-C-26RR000-000FK6XR2-2532-26A5C-003				
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	Fund (Appropriation) C				
	Budget Organization 26RR000				
	Program (PRC) 000FK6XR2				
	Budget (BOC) 2532				
	Job # (Site/Project)				
	Cost Organization 26A5C				
	DCN-LineID 003				
	Quantity: 0				
	Amount: \$1,160.00				
	CHANGES FOR ACCOUNTING CODE:				
	20-21-C-26RR000-000FK6XR1-2532-26A5C-2026RRC047-00				
	1				
	Amount changed from \$983,925.00 to \$882,204.00				
	Payment:				
	RTP Finance Center				
	US Environmental Protection Agency				
	RTP-Finance Center (AA216-01)				
	109 TW Alexander Drive				
	www2.epa.gov/financial/contracts				
	Durham NC 27711				
	Period of Performance: 06/30/2020 to 05/31/2022				
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6. ISSUED BY	CODE		7. ADMINISTERED BY (If other than Item 6)	CODE		
OMS/ARM US Enviror 1200 Penr	Scott, Director I/OAS/Policy, Training and Over nmental Protection Agency, Mai nsylvania Avenue, NW n, DC 20004	sight Division I Code 3802R			_		
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or (c) By separa RECEIVED AT by virtue of this communication	ng items 8 and 15, and returning ate letter or electronic communication which is THE PLACE DESIGNATED FOR THE RECE amendment you desire to change an offer al makes reference to the solicitation and this a TING AND APPROPRIATION DATA (If require	ncludes a reference to the sol EIPT OF OFFERS PRIOR TO ready submitted, such change mendment, and is received p	icitation and amendment num THE HOUR AND DATE SPE may be made by letter or ele	abers. FAILURE OF YO ECIFIED MAY RESULT I ectronic communication, late specified.	UR ACKNOWLE IN REJECTION (provided each le	DGMENT OF YOUR	TO BE OFFER. If
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X	B. THE ABOVE NUMBERED CONTRACT/(appropriation data, etc.) SET FORTH IN	ORDER IS MODIFIED TO RE ITEM 14, PURSUANT TO TH	FLECT THE ADMINISTRATI HE AUTHORITY OF FAR 43.1	VE CHANGES (such as 103(b).	changes in payi	ng office,	
	C. THIS SUPPLEMENTAL AGREEMENT IS		NT TO AUTHORITY OF:		· * · · · · · · · · · · · · · · · · · ·		
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		s required to sign this			s to the issuir	ng office	
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Except as provi	ded herein, all terms and conditions of the do	cument referenced in Item 9A	or 10A, as heretofore change	ed, remains unchanged	and in full force	and effect.	
	ND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF				•
			Raoul D. Scott, Dire	ctor Policy, Train	ing and Ove	ersight I	Division
15B. CONTRA	CTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF A		RAOUL SCOTT 1:40:17 -04'00'	16C. DA	TE SIGNED
(S	ignature of person authorized to sign)		(Signature	of Contracting Officer)			

52.204-25 Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

As prescribed in 4.2105(b) and in the applicability instructions in interim FAR Case 2019-009, insert the following clause:

Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (Aug 2020)

(a) <u>Definitions</u>. As used in this clause—

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means—

- (1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);
- (2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- (3) Telecommunications or video surveillance services provided by such entities or using such equipment; or
- (4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means-

- (1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;
- (2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-

- (i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or
 - (ii) For reasons relating to regional stability or surreptitious listening;
- (3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);
- (4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);
- (5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or
- (6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition. (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.

- (2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.
 - (c) Exceptions. This clause does not prohibit contractors from providing—
- (1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
 - (d) Reporting requirement.
- (1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.
- (2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause
- (i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
- (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

(End of clause)

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1. DATE OF OR	DER	2. CONTRACT NO. (If any) 68HERC19D0011						6. SHIP TO:		
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3. ORDER NO.			4 REQUISITION	REFERENCE NO.	\dashv					
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ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

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	000 26A Fun Fun Acc 20- RRC	FK7XR3 Budget (BOC): 2532 Cost: 5C DCN - Line ID: 2026RRC048-002					
	000 DCN Fun Fun 202 #68	F84 Budget (BOC): 2532 Cost: 26A5C - Line ID: 2026RRC048-003 ding Flag: Complete ded: \$22,362.00 6RRC048: New Task Order under Contract HERC19D0011 Titled: Workshop on Federal tinued					
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TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$289,340.08

ORDER FOR SUPPLIES OR SERVICES PAGE NO **SCHEDULE - CONTINUATION** 3 IMPORTANT: Mark all packages and papers with contract and/or order numbers. CONTRACT NO. ORDER NO. DATE OF ORDER 68HERC20F0315 68HERC19D0011 07/01/2020 ITEM NO. SUPPLIES/SERVICES QUANTITY UNIT UNIT **AMOUNT** QUANTITY ORDERED (c) PRICE (e) ACCEPTED (g) (d) (a) (b) (f) Government Human Health PFAS Research. TOCOR is Tia Groves; CO William Yates

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

Performance Work Statement National Academy of Sciences (NAS) Contract #68HERC19D0011 Task Order #68HERC20F0315

I. TITLE: Workshop on Federal Government Human Health PFAS Research

II. Task Order Contracting Officer Representative(s):

Task Order Contracting Officer
Representative (TOCOR)

Alternate Task Order Contracting Officer
Representative (Alt. TOCOR)

Name: Tia Groves Name: Robin Clarke

Office: Immediate Office of the Assistant

Office: Immediate Office of the Assistant

Administrator Administrator

Phone: 202-564-5709 **Phone:** 202-564-6493

Email: groves.tia@epa.gov Email: clarke.robin@epa.gov

III. PERIOD OF PERFORMANCE: Date of Task Order award through 12 months following award. Additional funding for this award will be provided by other Federal Agency partners

A. Purpose

The National Academies of Sciences, Engineering, and Medicine shall host a public workshop to allow for the presentation of federal research on Perfluoroalkyl and polyfluoroalkyl substances (PFAS). The NAS shall convene an expert committee to review submissions and presentations related to human health hazard and exposure research areas and provide a Workshop Report (that takes into consideration workshop meeting minutes and submittals) to participating Federal Agencies that outlines crucial research and data gaps and summarizes the views of participants on how to ensure that the Federal research program for PFAS is robust and focused on addressing the highest priority human health concerns.

B. Background

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a family of diverse fluorinated organic compounds that have been used in firefighting, chrome plating, as lubricants, in medical devices, and to coat and treat surfaces like carpeting, packaging, and cookware. Their manufacture and use have led to widespread distribution and occurrence in the environment. PFAS can be highly mobile and persistent in the environment, making cleanup a challenge. Depending on chemical structure, PFAS can accumulate at different levels in human, animal, and plant tissue and may be associated with a diverse set of adverse health effects.

Federal Agencies are spending significant resources to better understand PFAS chemistries, sample collection, compound identification and quantification, toxicities (including health effects in humans), fate and transport, occurrence and exposure, environmental removal and degradation, treatment, and evaluation of substitutes. U.S. Federal Agencies conducting research on PFAS include USDA, EPA, DoD, HHS (NIH, NIEHS, ATSDR/CDC, FDA), DOI (USGS), DOT, and DHS.

The scientific and technical input that would be provided by this task order would help to ensure the robustness of Federal research programs in this important area. The NAS is widely viewed as an impartial, knowledgeable, and respected organization, capable of ensuring audience acceptance about products with which it is associated. The NAS is also able to provide ready access to the full range of scientific and technical experts and to thoroughly screen such experts for conflicts of interests. By providing a mechanism to ensure participation with diverse scientific and technical input from experts identified and assembled by the NAS, the Federal Agencies can benefit from collaboration with the NAS.

C. Tasks

Task 1 - Workshop on Federal PFAS Research Related to Human Health

NAS shall convene a 2-day workshop to discuss the current state of federal research on Perfluoroalkyl and polyfluoroalkyl substances (PFAS) with a focus on human health hazards and human exposure to PFAS.

Subtask 1.1. – Establish coordination calls with Federal Agencies:

NAS shall convene a planning meeting(s) with the Federal Agency Task Order Contracting Officer Representative (TOCOR), and all Federal Agencies conducting research on PFAS. Participating Federal Agencies will identify their representative leads. This meeting(s) shall: identify agenda/topic areas and agency leads; discuss the fields of expertise that NAS should consider as necessary to provide input and comment on the federal research agendas; and deliberate any other relevant planning issues. In coordination with the TOCOR, NAS shall convene the first meeting within 2 weeks of the federal agencies identifying their representative leads. The workshop planning committee will make the final decisions about what expertise to include in the workshop.

Subtask 1.2. – Establish a workshop planning committee:

NAS shall identify a proposed workshop planning committee of at least 10 subject matter experts who are recognized experts in the field(s) relevant to the request; represent a range of broadly recognized views on the issues identified by Federal Agencies; are available to participate and discuss their individual views at the workshop; are willing to participate in the development of a workshop report; and have been evaluated for conflict of interest in accordance with established NAS procedures. The funding Agencies may provide a list of experts for consideration.

EPA and other agencies will have the opportunity to comment on the provisional committee roster when NAS publishes it for a 20-day comment period. The NAS shall determine who will serve on the committee.

Subtask 1.3. – Make arrangements for logistical support for each planning committee member and other experts asked to participate in the workshop:

NAS shall make arrangements for logistical support for the planning committee and other experts to participate in the workshop, which will be held online.

Subtask 1.4. – Conduct the workshop(s)/meeting(s):

NAS shall host a 2-day virtual workshop. The workshop shall allow for broad public participation. The workshop shall take place within 120 days of the start of the NAS contract.

Subtask 1.5 – Develop Workshop Output:

NAS shall prepare a final report reflecting committee findings on the research topics covered at the workshop. The report shall focus on identifying research gaps that the committee finds would be beneficial in responding to human health concerns related to PFAS. The workshop report, prepared by a rapporteur in accordance with NAS procedures, will also respond to specific questions identified by the federal agencies and provided by the TOCOR. The final report shall be delivered to the TOCOR, Contracting Officer (CO), and Contract Level CO Representative (CL-COR) 75 days following the conclusion of the workshop.

During the workshop, participants, including the planning committee, shall comment and provide input on the robustness of the Agencies' research, focusing on the identification of knowledge or research gaps, in the following areas:

1) Human health hazards, including

- a. Identification and characterization of health effects or bioactivities of interest in human populations.
- b. Criteria/factors to be considered when addressing a variety of different health effects within the decision-making process (i.e., severity vs. dose).
- c. Approaches for extrapolating from animal health effects to human health effects.
- d. Toxicokinetic and toxicodynamic issues related to extrapolating across species. For example, will toxicokinetic research increase understanding related to the default assumption of toxicity increasing in direct relationship with the half-life of PFAS? Will toxicodynamic research increase understanding of cross-species sensitivity for health effects (such as immune, liver, thyroid, reproductive/development effects)?
- e. Approach(es) for identification and use of PFAS additivity, synergism, or antagonism.
- f. Defining a class-based approach to characterizing PFAS health effects.

2) Human exposures, including

- a. Approaches for prospective biomonitoring of human populations at greatest risk.
- b. Identification of exposure sources and potential exposure pathways including the determination of relative source contribution for the different exposure pathways, including airborne fate and transport.

c. Consideration of potential ecotoxicological and ecotoxicokinetic issues which may impact human exposures, e.g. through agricultural or subsistence food web pathways.

Workshop participants shall not be limited to only these research areas and may comment on other identified research gaps and priorities responding to human health concerns related to PFAS as appropriate. However Federal Agencies would like to ensure these critical research areas are addressed.

Task 2 (Optional):

The EPA may require the NAS host an additional workshop(s), as a result of this effort. In the event an additional workshop(s) is needed, this TO contract (PWS) will be amended.

D. COVID Considerations

The NAS shall conduct all meetings, including the workshop itself, as virtual meetings.

E. Deliverables:

The products of the NAS tasks for this activity are as follows:

- a) Final planning committee list;
- b) Hosting and organization of a public workshop with broad audience attendance; and
- c) Prepublication Workshop Report to be produced and delivered 75 days following the conclusion of the workshop. The report will be a rapporteur-authored proceedings prepared and peer reviewed in accord with NAS procedures. The final (fully formatted) workshop report will be delivered within 120 days following the conclusion of the workshop.

F. Oversight

All interactions concerning charge, scope, expertise, milestone, meetings dates, meeting agendas, and deliverables under this Task Order shall be restricted to the EPA Contracting Officers (CO) and TOCOR.

GF. Acceptance

Administrative acceptance of contract deliverables will be by the EPA TOCOR.

H. Acceptance Criteria

NAS shall prepare and deliver electronic word documents and Prepublication and Final Workshop Report that are technically accurate, complete, timely, grammatically correct, and free of grammatical and spelling errors. These documents and reports shall conform to the specific task, charge, expertise, and deliverables of the Task Order.

Participating Federal Agency Contact Information:

Federal Agency Research Partners:

Department of Defense Dr. Herbert Nelson herbert.h.nelson10.civ@mail.mil

US Department of Agriculture John Pirchio john.pirchio@usda.gov (202) 720-1208 Office

Health and Human Services POC TBD

Department of Energy POC TBD

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CODE 04	1964057	FACILITY COD	E		07/01/2020			
		11. THIS IT	EM ONLY APPLIES TO A	MENI	DMENTS OF SOLICITATIONS			
Items 8 and 15, and returning copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified. 12. ACCOUNTING AND APPROPRIATION DATA (If required) See Schedule 13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14. CHECK ONE A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.								
Х		CT/ORDER IS M H IN ITEM 14, PU	ODIFIED TO REFLECT I	THE A	DMINISTRATIVE CHANGES (such as changes in TY OF FAR 43.103(b).			
	D. OTHER (Specify type of modification	and authority)						
E. IMPORTAN	T: Contractor X is not	is required t	o sign this document and	retur	n copies to the issuing	office.		
DUNS Num TOCOR: T The purp modifica	nber: 041964057 TIA GROVES Max Expire pose of this modifica ation signed by Raoul	e Date: 0 ation is . Scott o	6/30/2021 to incorporat n July 30, 20	ce 020	n solicitation/contract subject matter where feasibe the attached EPA blanket nformation" to the PWS.		ninist:	rative
15A. NAME AI		he document refe	renced in Item 9 A or 10A	16/ W i	neretofore changed, remains unchanged and in fo A. NAME AND TITLE OF CONTRACTING OFFIC .lliam M. Yates B. UNITED STATES OF AMERICA		pe or print)	
9	(Signature of person authorized to sign)			-	(Signature of Contracting Officer)	IGNAT	UPRE 0	9/24/2020

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 OF

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NAME OF OFFEROR OR CONTRACTOR

EM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment:	1			
	RTP Finance Center				
	US Environmental Protection Agency				
	RTP-Finance Center (AA216-01)				
	109 TW Alexander Drive				
	www2.epa.gov/financial/contracts				
	Durham NC 27711				
	Period of Performance: 07/01/2020 to 06/30/2021				
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AMEN	IDMENT OF SOLICITATION	MODIFICATION (OF CONTRACT	1. CONTRACT ID CO	DDE F	PAGE C	F PAGES
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6. ISSUED BY	CODE		7. ADMINISTERED BY (If other than Item 6)	CODE		
OMS/ARM US Enviror 1200 Penr	Scott, Director I/OAS/Policy, Training and Over nmental Protection Agency, Mai nsylvania Avenue, NW n, DC 20004	sight Division I Code 3802R			_		
	ADDRESS OF CONTRACTOR (Number, str	eet, county, State and ZIP Co	ode)	(X) 9A. AMENDME	NT OF SOLICITA	ATION NUI	MRER
To All EPA	Contractors			9B. DATED (SEI 10A. MODIFICA To all EPA (10B. DATED (SE	EITEM 11) TION OF CONTI	RACT/ORE	DER NUMBER
CODE		CILITY CODE				10. 1. 10.1	933
	11. THIS ITE	M ONLY APPLIES TO	AMENDMENTS OF S	OLICITATIONS			
or (c) By separa RECEIVED AT by virtue of this communication	ng items 8 and 15, and returning ate letter or electronic communication which is THE PLACE DESIGNATED FOR THE RECE amendment you desire to change an offer al makes reference to the solicitation and this a TING AND APPROPRIATION DATA (If require	ncludes a reference to the sol EIPT OF OFFERS PRIOR TO ready submitted, such change mendment, and is received p	icitation and amendment num THE HOUR AND DATE SPE may be made by letter or ele	abers. FAILURE OF YO ECIFIED MAY RESULT I ectronic communication, late specified.	UR ACKNOWLE IN REJECTION (provided each le	DGMENT OF YOUR	TO BE OFFER. If
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X	B. THE ABOVE NUMBERED CONTRACT/(appropriation data, etc.) SET FORTH IN	ORDER IS MODIFIED TO RE ITEM 14, PURSUANT TO TH	FLECT THE ADMINISTRATI HE AUTHORITY OF FAR 43.1	VE CHANGES (such as 103(b).	changes in payi	ng office,	
	C. THIS SUPPLEMENTAL AGREEMENT IS		NT TO AUTHORITY OF:		· * · · · · · · · · · · · · · · · · · ·		
	D. OTHER (Specify type of modification and	autnority)			· · · · · · · · · · · · · · · · · · ·		
		s required to sign this			s to the issuir	ng office	
This contra 4.2105, red Telecomm	act/order is being modified in acc quiring contracting officers to inc unications and Video Surveillanded for the full text version of FA	cordance with the ap lude FAR clause 52. ce Services or Equip	plicability instructions 204-25, Prohibition o ment.	s in interim FAR (on Contracting for	Case 2019-0 r Certain	009, an	d FAR
Except as provi	ded herein, all terms and conditions of the do	cument referenced in Item 9A	or 10A, as heretofore change	ed, remains unchanged	and in full force	and effect.	
	ND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF				•
			Raoul D. Scott, Dire	ctor Policy, Train	ing and Ove	ersight I	Division
15B. CONTRA	CTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF A		RAOUL SCOTT 1:40:17 -04'00'	16C. DA	TE SIGNED
(S	ignature of person authorized to sign)		(Signature	of Contracting Officer)			

52.204-25 Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

As prescribed in 4.2105(b) and in the applicability instructions in interim FAR Case 2019-009, insert the following clause:

Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (Aug 2020)

(a) <u>Definitions</u>. As used in this clause—

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means—

- (1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);
- (2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- (3) Telecommunications or video surveillance services provided by such entities or using such equipment; or
- (4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means-

- (1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;
- (2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-

- (i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or
 - (ii) For reasons relating to regional stability or surreptitious listening;
- (3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);
- (4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);
- (5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or
- (6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition. (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.

- (2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.
 - (c) Exceptions. This clause does not prohibit contractors from providing—
- (1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
 - (d) Reporting requirement.
- (1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.
- (2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause
- (i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
- (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

(End of clause)

AMENDME	ENT OF SOLICITATION/MODIFIC	ATION OF CO	NTRACT		1. CONTRACT ID CODE	PA	AGE OF	PAGES
2. AMENDME	NT/MODIFICATION NO.	3. EFFECTIVE D	DATE 4	4. RE	 QUISITION/PURCHASE REQ. NO.	5. PROJ	ECT NO.	∠ (If applicable)
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6. ISSUED BY	Y CODE	CAD	,	7. AE	MINISTERED BY (If other than Item 6)	CODE		
26 West Mail Co	ronmental Protection Martin Luther King I de: W136 ati OH 45268-0001							
8. NAME AND	DADDRESS OF CONTRACTOR (No., street	t, county, State and Z	IP Code)	x) 9/	A. AMENDMENT OF SOLICITATION NO.			
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DUNS Nu TOCOR: The pur	mber: 041964057 TIA GROVES Max Expire pose of this modifica ation signed by Raoul	Date: 06	/30/2021 o incorporate	e t	solicitation/contract subject matter where feasib the attached EPA blanket All other terms and c	admi		
15A. NAME A			enced in Item 9 A or 10A,	16A Wi 16B	eretofore changed, remains unchanged and in f NAME AND TITLE OF CONTRACTING OFFIC Lliam M. Yates UNITED STATES OF AMERICA		or print)	C. DATE SIGNED
9	(Signature of person authorized to sign)			-	(Signature of Contracting Officer)	IGNATU	0	9/29/2020

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NAME OF OFFEROR OR CONTRACTOR

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment:				
	RTP Finance Center				
	US Environmental Protection Agency				
	RTP-Finance Center (AA216-01) 109 TW Alexander Drive				
	www2.epa.gov/financial/contracts				
	Durham NC 27711				
	Period of Performance: 07/01/2020 to 06/30/2021				

AMEN	IDMENT OF SOLICITATION	MODIFICATION (OF CONTRACT	1. CONTRACT ID CO	DDE F	PAGE C	F PAGES
2. AMENDME	NT/MODIFICATION NUMBER	3. EFFECTIVE DATE 08/13/2020	4. REQUISITION/PURCHASE	E REQUISITION NUMBER	5. PROJECT I	NUMBER ((If applicable)
6. ISSUED BY	CODE		7. ADMINISTERED BY (If other than Item 6)	CODE		
OMS/ARM US Enviror 1200 Penr	Scott, Director I/OAS/Policy, Training and Over nmental Protection Agency, Mai nsylvania Avenue, NW n, DC 20004	sight Division I Code 3802R			_		
	ADDRESS OF CONTRACTOR (Number, str	eet, county, State and ZIP Co	ode)	(X) 9A. AMENDME	NT OF SOLICITA	ATION NUI	MRER
To All EPA	Contractors			9B. DATED (SEI 10A. MODIFICA To all EPA (10B. DATED (SE	EITEM 11) TION OF CONTI	RACT/ORE	DER NUMBER
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	11. THIS ITE	M ONLY APPLIES TO	AMENDMENTS OF S	OLICITATIONS			
or (c) By separa RECEIVED AT by virtue of this communication	ng items 8 and 15, and returning ate letter or electronic communication which is THE PLACE DESIGNATED FOR THE RECE amendment you desire to change an offer al makes reference to the solicitation and this a TING AND APPROPRIATION DATA (If require	ncludes a reference to the sol EIPT OF OFFERS PRIOR TO ready submitted, such change mendment, and is received p	icitation and amendment num THE HOUR AND DATE SPE may be made by letter or ele	abers. FAILURE OF YO ECIFIED MAY RESULT I ectronic communication, late specified.	UR ACKNOWLE IN REJECTION (provided each le	DGMENT OF YOUR	TO BE OFFER. If
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CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PUR NUMBER IN ITEM 10A.		1 16 17		3.00	NTRACT	ORDER
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Except as provi	ded herein, all terms and conditions of the do	cument referenced in Item 9A	or 10A, as heretofore change	ed, remains unchanged	and in full force	and effect.	
	ND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF				•
			Raoul D. Scott, Dire	ctor Policy, Train	ing and Ove	ersight I	Division
15B. CONTRA	CTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF A		RAOUL SCOTT 1:40:17 -04'00'	16C. DA	TE SIGNED
(S	ignature of person authorized to sign)		(Signature	of Contracting Officer)			

52.204-25 Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

As prescribed in 4.2105(b) and in the applicability instructions in interim FAR Case 2019-009, insert the following clause:

Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (Aug 2020)

(a) <u>Definitions</u>. As used in this clause—

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).

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Covered telecommunications equipment or services means—

- (1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);
- (2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- (3) Telecommunications or video surveillance services provided by such entities or using such equipment; or
- (4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means-

- (1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;
- (2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-

- (i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or
 - (ii) For reasons relating to regional stability or surreptitious listening;
- (3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);
- (4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);
- (5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or
- (6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition. (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.

- (2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.
 - (c) Exceptions. This clause does not prohibit contractors from providing—
- (1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
 - (d) Reporting requirement.
- (1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.
- (2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause
- (i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
- (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

(End of clause)

AMENDMENT OF SOLICITATION/MODIFICA	ATION OF CONTR	ACT	1. CONTRACT ID CODE	PAGE O	F PAGES
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REC	UISITION/PURCHASE REQ. NO.	5. PROJECT NO). (If applicable)
P00003	See Block 1	6C PR-C	RD-21-00160		, , , , ,
6. ISSUED BY CODE	CAD		MINISTERED BY (If other than Item 6)	CODE	
CAD US Environmental Protection 26 West Martin Luther King D Mail Code: W136 Cincinnati OH 45268-0001					
8. NAME AND ADDRESS OF CONTRACTOR (No., street	county. State and 7IP Cod.	e)	AMENDMENT OF SOLICITATION NO.		
National Academy of Sciences Attn: JAMES BURKE 500 FIFTH STREET NW NASHINGTON DC 200012736	county, State and 21r Cou	9B. x 10/68	DATED (SEE ITEM 11) A. MODIFICATION OF CONTRACT/ORDER NO SHERC19D0011 SHERC20F0315 B. DATED (SEE ITEM 13)	IO	
CODE 041964057	FACILITY CODE		7/01/2020		
CODE 041964057			ENTS OF SOLICITATIONS		
CHECK ONE A. THIS CHANGE ORDER IS ISSUED FORDER NO. IN ITEM 10A.	change an offer already to to the solicitation and tired) ODIFICATION OF CONT PURSUANT TO: (Specification of the solicitation of the solicitatio	submitted , such change d this amendment, and is TRACTS/ORDERS. IT MOY authority) THE CHANGE D TO REFLECT THE ADIT TO THE AUTHORITY	may be made by letter or electronic communic received prior to the opening hour and date specified prior to the	cation, provided pecified. ESCRIBED IN ITEM	
D. OTHER (Specify type of modification	and authority)				
E. IMPORTANT: Contractor X is not	is required to sign t	his document and return	copies to the issuin-	g office.	
14. DESCRIPTION OF AMENDMENT/MODIFICATION (DUNS Number: 041964057 TOCOR: TIA GROVES Max Expire LIST OF CHANGES: Reason for Modification: The from line one in the amount result for this mod will be	Date: 06/30 purpose of of \$72,335 a	/2021 this modific nd replace th	ation will be to de-obl	igate fun	='
CHANGES FOR LINE ITEM NUMBER	: 1				
CHANGES FOR ACCOUNTING CODE:					
Continued					
Except as provided herein, all terms and conditions of the 15A. NAME AND TITLE OF SIGNER (Type or print)	e document referenced	16A.	retofore changed, remains unchanged and in I NAME AND TITLE OF CONTRACTING OFFIC liam M. Yates		
15B. CONTRACTOR/OFFEROR	15C. D	ATE SIGNED 16B.	JNITED STATES OF AMERICA	16	C. DATE SIGNED
(Signature of person authorized to sign)		- 1.0			1/06/2020

 CONTINUATION SHEET
 REFERENCE NO. OF DOCUMENT BEING CONTINUED
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 OF

 68HERC19D0011/68HERC20F0315/P00003
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NAME OF OFFEROR OR CONTRACTOR

ITEM NO.	SUPPLIES/SERVICES	QUANTITY		UNIT PRICE	AMOUNT
(A)	(B)	(C)	(D)	(E)	(F)
	20-21-C-26RR000-000FK6XR2-2532-26A5C-2026RRC048-00				
	Amount changed from \$216,978.08 to \$144,643.08				
	Amount changed 110m \$210,570.00 to \$144,645.00				
	NEW ACCOUNTING CODE ADDED:				
	Account code:				
	20-21-CR-26RRX01-000FK8XPV-2532-26A5C-2126RRC002-0				
	01				
	Beginning FiscalYear 20 Ending Fiscal Year 21				
	Fund (Appropriation) CR				
	Budget Organization 26RRX01				
	Program (PRC) 000FK8XPV				
	Budget (BOC) 2532				
	Job # (Site/Project)				
	Cost Organization 26A5C				
	DCN-LineID 2126RRC002-001				
	Amount: \$72,335.00				
	Payment:				
	RTP Finance Center				
	US Environmental Protection Agency				
	RTP-Finance Center (AA216-01) 109 TW Alexander Drive				
	www2.epa.gov/financial/contracts				
	Durham NC 27711				
	Period of Performance: 07/01/2020 to 06/30/2021				

ESSUED BY CODE CAD 7. ADMINISTERED BY (# Other This rene (8) CODE CAD 7. ADMINISTERED BY (# Other Cad 7. ADMINISTERED BY (* Other Cad 7. ADMINISTERED BY (* Oth	AMENDMENT OF SOLICITATION/MODIFICA	ATION OF CONTRACT		CONTRACT ID CODE	PAGE	OF PAGES
Selection Select	2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQ	UISITION/PURCHASE REQ. NO.	5. PROJECT	NO. (If applicable)
ASSERBOY CODE CED TARAMINISTERED DY p' plant chan have \$ CODE CED SERVITORISMOSTAL Protection Agency SERVITORISMOSTAL Protection Agency SERVITORISMOSTAL Protection Agency SERVITORISMOSTAL Protection Agency Beal Code: M136 CED 45268-0301 E MARK AND ADDRESS OF CONTRACTORY, assistantly assistant and agency of the Contractor Officer No. Setting 1 AMRES BURKER SOD FIFTH STREET NN ASSELNATION DO 200012736 *** ISA ADDRESS OF CONTRACTOROGER NO. SETEMATORY OF CONTRACTOROGER NO. SETEMATORY OF CONTRACTOROGER NO. SETEMATORY OF CONTRACTOROGER NO. *** ISA ADDRESS OF CONTRACTOROGER NO. SETEMATORY OF CONTRACTOROGER NO. *** ISA ADDRESS OF CONTRACTOROGER NO. SETEMATORY OF CONTRACTOROGER NO. *** ISA ADDRESS OF CONTRACTOROGER NO. SETEMATOR OF CONTRACTOROGER NO. *** ISA ADDRESS OF CONTRACTOROGER NO. *** ISA ADDRESS OF THE SET NO. *** ISA ADDRESS	P00004	See Block 16C	PR-0	RD-21-00255		, , , , , , , , , , , , , , , , , , , ,
23 EAVISORMENTAL PROTECTION OF CONTRACTOR ORGANICATION FROM CONTRACTOR ORGANICATION NO. 24 ELANDA AND ADDRESS OF CONTRACTOR ORGANICATION AND ADDRESS AND ADDRESS OF CONTRACTOR ORGANICATION NO. 25 ELANDA AND ADDRESS OF CONTRACTOR ORGANICATION AND ADDRESS AND	No. 100 and 10		7. ADN	INISTERED BY (If other than Item 6)	CODE	
Note of the first street of the second secon		2 -				
Note of the first street of the second secon	8. NAME AND ADDRESS OF CONTRACTOR (No., street.	county. State and ZIP Code)		AMENDMENT OF SOLICITATION NO.		
The above numbered solicitation is amended as set from in tier 14. The torum and date specified in the solicitation are amended, by once of the lower part of the nour and date specified in the solicitation are amended, by once of the lower part of the nour and date specified in the solicitation are amended, by once of the other part of the nour and date specified in the solicitation are amended, by once of the other submitted in the solicitation and amendment an each copy of the other submitted in cycle by separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR CONTRACTION OF YOUR OFFER, they without of this amendment you desire to change an offer already submitted, such change may be referred by the or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the operating boar and date specified. 12. ACCOUNTING AND APPROPRIATION DATA (if required) See Schedule 13. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. AS DESCRIBED IN ITEM 14. CHECK ONE A THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. AS DESCRIBED IN ITEM 14. CHECK ONE A THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES (such as changes in paying office, specify in plant of the submitted date, such as changes in paying office, specify in plant of the submitted date, such as changes in paying office, specify in the date of the submitted date, such as changes in paying office, specify in the date of the submitted date, such as changes in paying office, specify in the date of the submitted date of t	National Academy of Sciences Attn: JAMES BURKE 500 FIFTH STREET NW WASHINGTON DC 200012736		98. × 10/6 8	DATED (SEE ITEM 11) . MODIFICATION OF CONTRACT/ORDER HERC19D0011 HERC20F0315	NO.	
### THE TEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers and a denote degree of the hour and date specified for receipt of Offers and a denote offer of the hour and date specified for receipt of Offers and 15, and returning	CODE 041064057	FACILITY CODE	-	L. A Villa and N. She and the		
The above numbered solicitation is amended as set forth in item 14. The bour and date specified for receipt of Offices seated-edd list not extended. Offices made admonfacely receipt of this amendment prior to the hour and date specified for receipt of this amendment prior to the hour and date specified for receipt of the individual prior of the solicitation and semantic provided of this amendment on each copy of the office admonface (of 6) separate better or electronic communication with induces a reference to the solicitation and mendment numbers. FAILURE OF YOUR Provided Prior to the Communication and the semantic provided and the semantic provided prior of the communication and the semantic provided prior of the communication and the semantic provided seat failed or electronic communication makes reference to the solicitation and the semantic provided seat failed or electronic communication makes reference to the solicitation and the semantic provided seat failed or electronic communication makes reference to the solicitation and the semantic provided seat failed or electronic communication makes reference to the solicitation and the semantic provided seat failed or electronic communication provided seat failed or electronic communication makes reference to the solicitation and the semantic provided seat failed or electronic communication makes reference to the solicitation and the semantic provided seat failed or electronic communication makes reference to the seaton of the seaton and				*		
E.IMPORTANT: Contractor	RECEIVED AT THE PLACE DESIGNATED FOR THE OFFER. If by virtue of this amendment you desire to deach letter or electronic communication makes referer 12. ACCOUNTING AND APPROPRIATION DATA (If requisee Schedule 13. THIS ITEM ONLY APPLIES TO ME CHECK ONE A. THIS CHANGE ORDER IS ISSUED FORDER NO. IN ITEM 10A. B. THE ABOVE NUMBERED CONTRAC appropriation data, etc.) SET FORTH	RECEIPT OF OFFERS PRIOR change an offer already submitted to the solicitation and this and the contracts of the contracts of the contracts of the contract of the	TO THE HOUR A ed , such change mendment, and is storders. IT MO city) THE CHANG EFLECT THE ADI HE AUTHORITY	ND DATE SPECIFIED MAY RESULT IN RE, may be made by letter or electronic communities and prior to the opening hour and date substituting the contract/ORDER NO. AS DES SET FORTH IN ITEM 14 ARE MADE IN MINISTRATIVE CHANGES (such as changes OF FAR 43.103(b).	JECTION OF YO ication, provided specified. ESCRIBED IN IT	DUR
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) DUNS Number: 041964057 TOCOR: TIA GROVES Max Expire Date: 06/30/2021 LIST OF CHANGES: Reason for Modification: The purpose of this modification will be to de-obligate funding on line one in the amount of \$36,167.62 and replace this funding with "CR" funding in the amount of \$36,167.62. This modification will result in "zero" dollars added to this task order. CHANGES FOR LINE ITEM NUMBER: 1 CHANGES FOR ACCOUNTING CODE: Continued Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A. as heretofore changed, remains unchanged and in full force and effect. 15A. NAME AND TITLE OF SIGNER (Type or print) William M. Yates 15B. CONTRACTOR/OFFEROR 15C. DATE SIGNED 16C. DATE SIGNED 12/23/2020	D. OTHER (Specify type of modification	and authority)				
DUNS Number: 041964057 FOCOR: TIA GROVES Max Expire Date: 06/30/2021 LIST OF CHANGES: Reason for Modification: The purpose of this modification will be to de-obligate funding on line one in the amount of \$36,167.62 and replace this funding with "CR" funding in the amount of \$36,167.62. This modification will result in "zero" dollars added to this task order. CHANGES FOR LINE ITEM NUMBER: 1 CHANGES FOR ACCOUNTING CODE: CONTINUED Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect. 15A. NAME AND TITLE OF SIGNER (Type or print) William M. Yates 15B. CONTRACTOR/OFFEROR 15C. DATE SIGNED 16B. UNITED STATES OF AMERICA SIGNATURE 12/23/2020	E. IMPORTANT: Contractor 🗵 is not	is required to sign this docu	ıment and return	copies to the issui	ing office.	
15B. CONTRACTOR/OFFEROR 15C. DATE SIGNED 16B. UNITED STATES OF AMERICA 16C. DATE SIGNED 16D. UNITED STATES OF AMERICA 16C. DATE SIGNED 16D. DA	DUNS Number: 041964057 TOCOR: TIA GROVES Max Expire LIST OF CHANGES: Reason for Modification: The line one in the amount of \$3 this funding with "CR" funding in "zero" dollars added to the CHANGES FOR LINE ITEM NUMBER CHANGES FOR ACCOUNTING CODE: Continued	Date: 06/30/202 purpose of this 6,167.62 and rep ng in the amount his task order. 1	s modification and state a	ation will be to de-ob. 167.62. This modificate 167.62 this modificate 167.	ligate f tion wil	l result
	15B. CONTRACTOR/OFFEROR	15C. DATE SIG	GNED 16B. I	UNITED STATES OF AMERICA		16C. DATE SIGNED
	(Signature of person authorized to sign)	_		A SURVEY OF ST. BUTTON OF	SIGNATURE	12/23/2020

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NAME OF OFFEROR OR CONTRACTOR

TEM NO.	SUPPLIES/SERVICES	QUANTITY (C)	UNIT (D)	UNIT PRICE	AMOUNT
(A)	(B)		(D)	(E)	(F)
	20-21-C-26RR000-000FK6XR2-2532-26A5C-2026RRC048-00				
	Amount changed from \$144,643.08 to \$108,475.46				
	NEW ACCOUNTING CODE ADDED:				
	Account code:				
	21-22-CR-26RRX02-000FK6XR2-2532-26A5C-2126RRC005-0				
	01				
	Beginning FiscalYear 21				
	Ending Fiscal Year 22				
	Fund (Appropriation) CR				
	Budget Organization 26RRX02				
	Program (PRC) 000FK6XR2				
	Budget (BOC) 2532				
	Job # (Site/Project)				
	Cost Organization 26A5C DCN-LineID 2126RRC005-001				
	Quantity: 0				
	Amount: \$36,167.62				
	Percent: 12.50004				
	Subject To Funding: N				
	Payment:				
	RTP Finance Center				
	US Environmental Protection Agency				
	RTP-Finance Center (AA216-01)				
	109 TW Alexander Drive				
	www2.epa.gov/financial/contracts Durham NC 27711				
	Period of Performance: 07/01/2020 to 06/30/2021				
	Period of PeriorMance: 0//01/2020 to 06/30/2021				
		l	1		

AMENDMENT OF SOLICITATION/MODIFICA	ATION OF CO	ONTRACT		CONTRACT ID CODE	PAGE	OF PA	AGES
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE	DATE	4. REQ	UISITION/PURCHASE REQ. NO.	5. PROJEC	T NO. (#	2 applicable)
P00005	 See Bloo	ck 16C	See	Schedule			
6. ISSUED BY CODE	CAD		7. ADN	IINISTERED BY (If other than Item 6)	CODE		
CAD US Environmental Protection 26 West Martin Luther King D Mail Code: W136 Cincinnati OH 45268-0001					_		
8. NAME AND ADDRESS OF CONTRACTOR (No., street	county State and	ZIP Code)	(X) 9A.	AMENDMENT OF SOLICITATION NO.			
National Academy of Sciences Attn: JAMES BURKE 500 FIFTH STREET NW WASHINGTON DC 200012736 CODE 041964057 FACILITY CODE				DATED (SEE ITEM 11) MODIFICATION OF CONTRACT/ORDER NOT HERC 19D0011 HERC 20F0315 . DATED (SEE ITEM 13)	0.		
CODE 041964057	FACILITY CODI	<u> </u>	0	7/01/2020			
7,575.1	 11. THIS ITE	M ONLY APPLIES TO AN		ENTS OF SOLICITATIONS			
CHECK ONE A. THIS CHANGE ORDER IS ISSUED FORDER NO. IN ITEM 10A.	RECEIPT OF OI change an offer a nce to the solicita uired) ODIFICATION OI PURSUANT TO: OTHER S MO	FERS PRIOR TO THE Inference of the second submitted and this amendment, from the second secon	HOUR A hange and is	ND DATE SPECIFIED MAY RESULT IN REJE may be made by letter or electronic communicate received prior to the opening hour and date specified by the contract/order no. AS DESESSET FORTH IN ITEM 14 ARE MADE IN THE MINISTRATIVE CHANGES (such as changes in OF FAR 43.103(b).	ection of Y ation, provide ecified. SCRIBED IN I	OUR d	
D. OTHER (Specify type of modification	and authority)						
E. IMPORTANT: Contractor X is not	is required to	sign this document and	return	copies to the issuing	office.		
14. DESCRIPTION OF AMENDMENT/MODIFICATION DUNS Number: 041964057 TOCOR: TIA GROVES Max Expire LIST OF CHANGES: Reason for Modification: The replace the funding with fun the USDA for their contribut	Date: 00 purpose ds receiv	5/30/2021 of this modi ved from	fica	ation will be to change		ındin	g and
CHANGES FOR LINE ITEM NUMBER	: 1						
NEW ACCOUNTING CODE ADDED:							
Account code:							
Continued			Electric Control				
Except as provided herein, all terms and conditions of the 15A. NAME AND TITLE OF SIGNER (<i>Type or print</i>)	e document refe	renced in Item 9 A or 10A	16A. I	etofore changed, remains unchanged and in for IAME AND TITLE OF CONTRACTING OFFIC Liam M. Yates			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED	16B. U	INITED STATES OF AMERICA	CCYRONIC		DATE SIGNED
(Signature of person authorized to sign)			1.3	(Signature of Contracting Officer)	IGNATURE	04/	/30/2021

 CONTINUATION SHEET
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NAME OF OFFEROR OR CONTRACTOR

ITEM NO.	SUPPLIES/SERVICES	QUANTITY		UNIT PRICE	AMOUNT
(A)	(B)	(C)	(D)	(E)	(F)
	20-21-CR-26RRX03-000FK6XR2-2532-26A5C-2126RRC012-0				
	01				
	Beginning FiscalYear 20				
	Ending Fiscal Year 21				
	Fund (Appropriation) CR				
	Budget Organization 26RRX03				
	Program (PRC) 000FK6XR2				
	Budget (BOC) 2532				
	Job # (Site/Project)				
	Cost Organization 26A5C				
	DCN-LineID 2126RRC012-001				
	DCN-LINEID ZIZ6RRC01Z-001				
	Amount: \$69,309.12				
	CHANGES FOR ACCOUNTING CODE:				
	20-21-C-26RR000-000FK6XR2-2532-26A5C-2026RRC048-00				
	1				
	Amount changed from \$108,475.46 to \$39,166.34				
	Payment:				
	RTP Finance Center				
	US Environmental Protection Agency				
	RTP-Finance Center (AA216-01)				
	109 TW Alexander Drive				
	www2.epa.gov/financial/contracts				
	Durham NC 27711				
	Period of Performance: 07/01/2020 to 06/30/2021				
0002	Disregard line item 1. Deobligate \$72,336 from				0.00
	Line 001				
	Contract: 68HERC19D0011				
	Task Order: 68HERC20F0315				
	Funded PR forthcoming to replace deobligated				
	funds with CR funds				
	Tunds with or funds				

AMENDMENT OF SOLICITATION/MODIFIC	ATION OF CONTRACT		1. CONTRACT ID CODE	PAGE	OF PAGES
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQ	UISITION/PURCHASE REQ. NO.	5. PROJECT	NO. (If applicable)
P00006	See Block 16C				
6. ISSUED BY CODE	CAD	7. ADN	MINISTERED BY (If other than Item 6)	CODE	
CAD US Environmental Protection 26 West Martin Luther King D Mail Code: W136 Cincinnati OH 45268-0001					
8. NAME AND ADDRESS OF CONTRACTOR (No., street	county State and ZIP Code)	I9A	AMENDMENT OF SOLICITATION NO.		
National Academy of Sciences Attn: JAMES BURKE 500 FIFTH STREET NW WASHINGTON DC 200012736	county, case and 211 Coddy	9B. x 10/6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	DATED (SEE ITEM 11) A. MODIFICATION OF CONTRACT/ORDER IN THER C19D0011 HERC20F0315 B. DATED (SEE ITEM 13)	NO.	
CODE 041964057	FACILITY CODE	─ o	7/01/2020		
	11. THIS ITEM ONLY APPLIES	I I S TO AMENDM	ENTS OF SOLICITATIONS		
CHECK ONE A. THIS CHANGE ORDER IS ISSUED FORDER NO. IN ITEM 10A. B. THE ABOVE NUMBERED CONTRAC appropriation data, etc.) SET FORTH	RECEIPT OF OFFERS PRIOR TO change an offer already submitted , nee to the solicitation and this ameraired) ODIFICATION OF CONTRACTS/OI PURSUANT TO: (Specify authority) CT/ORDER IS MODIFIED TO REFLET IN ITEM 14, PURSUANT TO THE	D THE HOUR A , such change ndment, and is RDERS. IT MO) THE CHANG LECT THE ADI E AUTHORITY	IND DATE SPECIFIED MAY RESULT IN REJ may be made by letter or electronic communi received prior to the opening hour and date s DDIFIES THE CONTRACT/ORDER NO. AS DI ES SET FORTH IN ITEM 14 ARE MADE IN MINISTRATIVE CHANGES (such as changes OF FAR 43.103(b).	ECTION OF YO cation, provided specified. ESCRIBED IN IT	TEM 14.
C. THIS SUPPLEMENTAL AGREEMEN D. OTHER (Specify type of modification		TO AUTHORI	TY OF:		
E. IMPORTANT: Contractor X is not	is required to sign this docume	ent and return	copies to the issuir	ng office.	
14. DESCRIPTION OF AMENDMENT/MODIFICATION DUNS Number: 041964057 TOCOR: TIA GROVES Max Expire LIST OF CHANGES: Reason for Modification: The the ending date of the perio remain the same.	Date: 06/30/2021 purpose of this a	adminis to 30 An	crative modification wingust 2021. All other	all be to	
Period Of Performance End Da	te changed from 3	0-JUN-2	l to 30-AUG-21		
CHANGES FOR LINE ITEM NUMBER					
End Date changed from 30-JUN	-21 to 30-AUG-21				
Continued	a decument of the second second	10 A	sotoforo obonizad accessiva in the contract of	full farrer	foot
Except as provided herein, all terms and conditions of the 15A. NAME AND TITLE OF SIGNER (Type or print)	e document referenced in Item 9 A	16A. I	etofore changed, remains unchanged and in NAME AND TITLE OF CONTRACTING OFF liam M. Yates		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNI	ED 16B. I	UNITED STATES OF AMERICA	LECYRONIC	16C. DATE SIGNED
(Signature of person authorized to sign)			(Signature of Contracting Officer)	SIGNATURE	05/27/2021

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NAME OF OFFEROR OR CONTRACTOR

ITEM NO.	SUPPLIES/SERVICES	QUANTITY		UNIT PRICE	AMOUNT
A)	(B)	(C)	(D)	(E)	(F)
	CHANCES FOR RELIGIOUS ACCRETION OF R				
	CHANGES FOR DELIVERY LOCATION: CAD Delivery Date changed from 06/30/2021 to				
	08/30/2021				
	Payment:				
	RTP Finance Center				
	US Environmental Protection Agency RTP-Finance Center (AA216-01)				
	109 TW Alexander Drive				
	www2.epa.gov/financial/contracts				
	Durham NC 27711				
	Period of Performance: 07/01/2020 to 08/30/2021				

AMENDMENT OF SOLICITATION/MODIFIC	ATION OF CONTRACT		CONTRACT ID CODE	P.	AGE OF PAGES
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQ	UISITION/PURCHASE REQ. NO.	5. PRO	1 2 DECT NO. (If applicable)
P00007	See Block 16C				
6. ISSUED BY CODE	CAD	7. ADN	IINISTERED BY (If other than Item 6)	CODE	
CAD US Environmental Protection 26 West Martin Luther King I Mail Code: W136 Cincinnati OH 45268-0001					
8. NAME AND ADDRESS OF CONTRACTOR (No., street	t, county, State and ZIP Code)	(v) 9A.	AMENDMENT OF SOLICITATION NO.		
National Academy of Sciences Attn: JAMES BURKE 500 FIFTH STREET NW WASHINGTON DC 200012736		9B. x 102 6.8	DATED (SEE ITEM 11) . MODIFICATION OF CONTRACT/ORDER HERC19D0011 HERC20F0315 . DATED (SEE ITEM 13)	NO.	
CODE 041964057	FACILITY CODE		7/01/2020		
	11. THIS ITEM ONLY APPLIE		· · · · · · · · · · · · · · · · · · ·		
CHECK ONE A. THIS CHANGE ORDER IS ISSUED ORDER NO. IN ITEM 10A.	PURSUANT TO: (Specify authority	/) THE CHANG	ES SET FORTH IN ITEM 14 ARE MADE IN MINISTRATIVE CHANGES (such as change OF FAR 43.103(b).	THE CONT	RACT
C. THIS SUPPLEMENTAL AGREEMEN D. OTHER (Specify type of modification		TTO AUTHORI	Y OF:		
B. OTTER (opeciny type of mounication	ана аштотку)				
E.IMPORTANT: Contractor Sis not 14. DESCRIPTION OF AMENDMENT/MODIFICATION DUNS Number: 041964057 FOCOR: TIA GROVES Max Expire LIST OF CHANGES: Reason for Modification: The funding in the amount of \$64	Date: 06/30/2021 purpose of this	ngs, including s	olicitation/contract subject matter where fea	sible.)	excess
Total Amount for this Modifi New Total Amount for this Ve New Total Amount for this Aw Obligated Amount for this Mo New Total Obligated Amount f Continued	rsion: \$225,304.5 ard: \$225,304.54 dification: -\$64, or this Award: \$2	035.54 225,304.5		n full force a	nd effect.
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. I	NAME AND TITLE OF CONTRACTING OF		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGN	NED 16B. U	liam M. Yates UNITED STATES OF AMERICA	ELCCYROI SIGNATU	

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NAME OF OFFEROR OR CONTRACTOR

ΓΕΜ NO.	SUPPLIES/SERVICES	QUANTITY	0 1	UNIT PRICE	AMOUNT
(A)	(B)	(C)	(D)	(E)	(F)
	CHANGES FOR LINE ITEM NUMBER: 1				
	Total Amount changed				
	from \$289,340.08 to \$225,304.54				
	Obligated Amount for this Modification:				
	-\$64,035.54				
	CHANGES FOR DELIVERY LOCATION: CAD				
	Amount changed from \$289,340.08 to \$225,304.54				
	77				
	CHANGES FOR ACCOUNTING CODE:				
	20-21-C-26RR000-000FK6XR2-2532-26A5C-2026RRC048-00				
	1 Amount changed from \$39,166.34 to \$17,872.26				
	CHANGES FOR ACCOUNTING CODE:				
	20-21-C-26RR000-000FK7XR3-2532-26A5C-2026RRC048-00				
	2				
	Amount changed from \$50,000.00 to \$44,254.94				
	CHANGES FOR ACCOUNTING CODE:				
	20-21-CR-26RRX01-000FK8XPV-2532-26A5C-2126RRC002-0				
	01				
	Amount changed from \$72,335.00 to \$56,326.14				
	Percent changed from 24.99999 to 0				
	,				
	CHANGES FOR ACCOUNTING CODE:				
	21-22-CR-26RRX02-000FK6XR2-2532-26A5C-2126RRC005-0				
	01				
	Amount changed from \$36,167.62 to \$28,163.06				
	Percent changed from 12.50004 to 0				
	CHANGES FOR ACCOUNTING CODE:				
	20-21-CR-26RRX03-000FK6XR2-2532-26A5C-2126RRC012-0				
	01 Amount changed from \$69,309.12 to \$56,326.14				
	Amount changed 110m \$69,309.12 to \$36,326.14				
	Payment:				
	RTP Finance Center				
	US Environmental Protection Agency				
	RTP-Finance Center (AA216-01)				
	109 TW Alexander Drive				
	www2.epa.gov/financial/contracts				
	Durham NC 27711				
	Period of Performance: 07/01/2020 to 08/30/2021				